CHAPTER SEVENTEEN

# Conventional Operations and Warfare: *A New Era Ahead?*

Where are warfare and military operations headed in the coming years? What are the implications for U.S. forces? This chapter examines these intriguing and important questions. While Chapter 5 addressed the global military balance, this chapter goes a step further and examines how these forces are likely to operate on the modern battlefield. It surveys trends in technology, doctrine, and force structure and how they will interact to shape future operations not only for U.S. forces, but for other forces as well, both allies and adversaries.

This chapter forecasts continuity and change. The traditional, fundamental principles of war will still apply. Yet, major departures are coming for two reasons. Many military forces are going to become more powerful and capable of high-technology warfare at the high end of the conflict spectrum. And a growing number of conflicts likely will be fought at the low end of the spectrum. Sophisticated technology may not be dominant in many of them. Both trends, and their interaction, will change warfare.

This dynamic is hardly surprising. Warfare has continually evolved over the past two centuries. Military establishments that best anticipated change have generally been the most successful in war. By contrast, those that failed to foresee the future, and remained complacent and static, have often been surprised and defeated. The French Army in 1940 is an example. It had previously failed to see how new technology and doctrine were changing warfare. It surprisingly fell victim to a reborn German army that had embraced change. The French case is not unique.

The reality is that any military establishment wishing to retain decisive power must anticipate and prepare for the future. The same applies to U.S. forces today. They are the world's preeminent military power. U.S. forces capitalized on trends that influenced weapons and operations from the early 1970s to the early 1990s. However, their superiority is not permanent. They are again faced with adapting to change. Moreover, the key issue is not the absolute strength of U.S. forces, but their relative strength and how they are used. They must be able to prevail over opponents in clearly defined missions. If U.S. forces remain static, their current relative advantage will erode, perhaps quickly, as other countries adapt to changes in warfare.

U.S. forces are embracing change through *Joint Vision 2010* and the revolution in military affairs (RMA). In doing so, they must avoid self-preoccupation and understand where warfare is

headed around the world. This ensures that *Joint Vision 2010* and the RMA are channeled in the right directions. Additionally, high technology can strengthen U.S. forces. Yet, the key consideration is not whether U.S. forces achieve ever-higher levels of technological sophistication, but whether they can actually fight and win the wars of the future. This will require good personnel, high readiness, and mastery of new battlefield doctrine against future opponents.

## Key Trends

New weapons and doctrines set the stage for the success in *Desert Storm* in 1991. The process of transforming U.S. forces began in the 1970s. The Department of Defense began acquiring improved strategic mobility assets for swift power projection to Europe, the Persian Gulf, and Asia. It accelerated in the 1980s, when a new generation of ground, air, and naval weapon systems was acquired to support new doctrinal concepts of the time. The Abrams tank and Bradley infantry-fighting vehicle permitted ground forces to switch from static linear defense to fast-moving maneuver operations. Acquisition of F–15 and F–16 aircraft allowed air forces to conduct lethal, deep strikes and interdiction missions. U.S. naval forces followed the same approach as they acquired the F–14 and F–18 and cruise missiles.

In some ways, this evolutionary pattern continues. Although a new generation of platforms is appearing, U.S. forces—through 2010 and even later—will still employ tanks, fighter bombers, and aircraft carriers. But in more fundamental ways, a true revolution is occurring, because new technologies are being combined with new doctrines and organizations to alter greatly the conduct of military operations. This revolution is being propelled especially by the widespread introduction of modern information systems, which include not only computers and data banks, but also greatly enhanced ways to guide operational planning and force employment at all command echelons. These changes will help pave the way to concepts outlined by *Joint Vision 2010:* information warfare, dominant maneuver, precision engagement, full dimensional protection, and focused logistics.

What do these concepts mean? By 2010, U.S. forces will achieve greater synergy from merging ground, air, and naval operations. These joint forces will rely even more than now on swift power projection, information dominance, deep strikes, and rapid maneuvers. *Joint Vision 2010* implies that U.S. force operations may be radically different in character. They will be conducted at greater distances and at a faster pace. More emphasis will be placed on crippling the enemy's command and control, as well as fracturing cohesion. Operations likely will be conducted with different force structures. Equally important, they will bring about a different mentality in waging war.

The RMA will depend on information technologies and integrated networks, greatly enhancing the efficiency and effectiveness of U.S. forces. They will be incorporated into an overall information architecture consisting of four interlocking grids: a communications grid, a sensor grid, an engagement grid, and a defense suppression and protection grid. This will empower battlefield decisionmaking at all levels. This development will further propel changes already underway in all mediums of warfare. U.S. ground forces—Army and Marine—will place greater emphasis on dispersal, fast maneuvers, and deep strikes. These will be conducted with a wide range of assets to include armored, mechanized, infantry, air assault, and amphibious forces. U.S. air forces will conduct their traditional missions of air defense, counterair, strategic bombardment, logistics interdiction, and close air support, but in new ways that combine synergy and lethality. They also will increasingly execute near-real time strikes against enemy forces approaching the battlefield. U.S. naval forces will conduct littoral offensive operations with air and missile attacks. These components will become increasingly interlocked by means of information technologies and joint operations, further enhancing the joint capabilities of U.S. forces.

The magnitude of change will depend upon the field experiments now underway in all services. They also will depend upon the acquisition pace of new technologies, which will be influenced by defense procurement budgets. The *1997*

### U.S. Conventional Forces

Current U.S. military manpower includes about 1.4 million active-duty personnel and 877,000 reserve component personnel. DOD also has about 747,000 civilians. Conventional forces are composed of:

**Land Forces**

Army: 10 active and 8 reserve component divisions; 3 active and 18 separate brigades; 6 active and 2 reserve special forces groups/regiments.
Marines: 3 active and 1 reserve divisions.

**Tactical Air Forces:**

USAF: 955 active and 587 reserve combat aircraft, plus 54 conventional bombers.
Marines: 301 active and 52 reserve combat aircraft.
Navy: 468 active and 39 reserve combat aircraft.

**Naval Forces:**

Major Battle Forces: 257 ships
Support Ships: 23
Reserve Ships: 16

**Mobility Forces:**

Intertheater Airlift: 308 aircraft
Intratheater Airlift: 388 aircraft
Sealift Ships, Active: 60
Sealift Ships, Reserve: 96

AP/Wide World Photos

**The new aircraft carrier *Charles de Gaulle*, France's largest and its first to be powered by nuclear energy**

*Quadrennial Defense Review* envisioned a moderate rate of transformation. Even at a moderate pace, U.S. forces could acquire significantly greater combat capabilities by 2010.

These changes might seem to ensure that U.S. forces will retain, or even improve their already-wide margin of superiority over potential opponents. Yet, examining U.S. forces in isolation assesses only the degree to which future U.S. forces will differ from those of today. What matters more is "relative" change: the extent to which U.S. forces improve relative to other countries, especially potential adversaries. Moreover, future adversaries may employ adept battlefield strategies that seek to minimize U.S. force advantages while maximizing their own.

Ensuring future military advantage, therefore, depends on an awareness of worldwide military trends in operations and warfare. The following general trends are best viewed as hypotheses rather than axioms. They indicate where future warfare may be headed in broad terms. Modern forces will conform to them in varying degrees.

## Politics—Still the Origin and Limits of War

Wars are always outgrowths of political conflict and are waged to achieve political goals, rather than military victory for its own sake. Yet, the degree of political influence over military operations is a variable, not a constant. At one extreme, political conditions can set the stage for war but have little direct impact on military operations, which are conducted in keeping with military strategy and force capabilities. At the other extreme, political conditions can deeply affect force operations, often causing them to depart from purely military considerations. In between these two poles lies a wide spectrum of possibilities.

World War II and the Cold War were intensely political conflicts animated by deep ideological antagonism between competing powers. Yet, they allowed force operations to be heavily influenced by military strategy and related considerations. In the coming era, political considerations are likely to have a greater impact on force operations. Military conflicts in the near future will likely not be global, but regional and local.

### The Kosovo Conflict

The Kosovo conflict may be a forerunner of things to come. The conflict had its origins in regional diplomacy and politics. It erupted when Serbia refused to accept the Rambouillet accords. The savage Serbian ethnic cleansing of Kosovo was carried out within Yugoslavia's borders, but it had larger implications for stability across the Balkans and Europe. By resurrecting some of Hitler's practices, it raised the specter of such heinous values being reinstalled and spreading elsewhere. It engaged U.S. and NATO interests not only because of local geopolitical issues and humanitarian concerns, but also because of the wider precedent being set.

Serbia advanced into Kosovo with an outdated army, but with ample capability to overpower unarmed Kosovars and the Kosovar Liberation Army. The result was a sweeping campaign of ethnic cleansing conducted with stunning speed and ferocity—evidently intended to succeed before NATO could respond with decisive force. Initially, NATO responded with a limited air bombardment campaign aimed at degrading Serb forces to compel Milosevic to return to the bargaining table. As the Serb campaign in Kosovo accelerated, NATO responded with an escalating air campaign, but it was constrained by bad weather, concern about collateral damage, and other factors. As the crisis escalated, mounting calls were heard for NATO ground intervention, yet this response was constrained not only by political hesitancy, but also by the sheer difficulty of swiftly moving large ground forces to an area outside the traditional NATO operating area. Fortunately, the NATO air campaign succeeded. In June 1999, the war ended in a partial settlement favorable to NATO.

Kosovo's enduring implications will be debated for some time. But even now, key lessons can be drawn. This conflict was neither a "major theater war" nor a peacekeeping operation. Instead, it was a "smaller scale contingency" with serious fighting and force operations. It exposed the deeply political nature of future wars and the capacity of adversaries to exploit asymmetric strategies. It illuminated the need for swift U.S. crisis responses and joint operations. It also illuminated the need for NATO European members to have effective power-projection assets. Above all, it makes clear that Europe remains a region where wars can still occur.

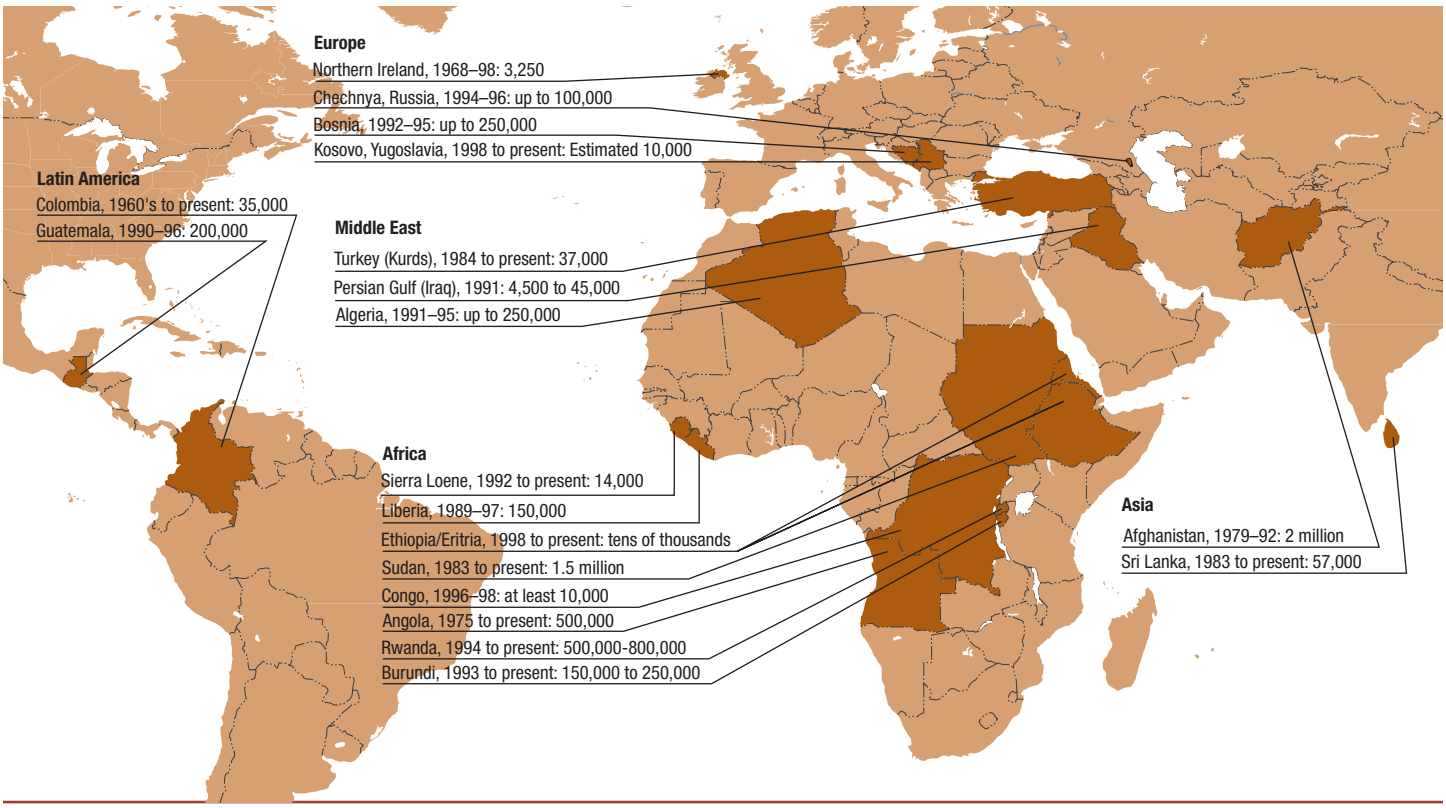
They are likely not to seek destruction or conquest of opponents but alteration of their policies in specific and limited ways. If so, military operations are likely to be subordinated to and constrained by political considerations.

A force operation may be aimed at defeating an enemy on the battlefield. However, an operation aimed at achieving specific political goals, while not necessarily destroying or even defeating the enemy, can be something different. Such use of military forces will vary for each country. Many regional powers will be required to assemble only enough military power to achieve limited political goals, rather than maintain stronger forces needed to destroy opponents. Moreover, the act of pursuing narrow political goals may allow them to focus on developing specific capabilities rather than full-spectrum operations. This situation may allow them to assemble stronger forces than normally would be the case. Even modest defense budgets and limited technology may enable them to build forces that are effective in relation to the specific political goals being pursued.

For the United States, the challenge will be more complicated. It will not be able to optimize U.S. forces to fit a single political-military situation because of its global role. Instead, the United States will need flexible forces that can quickly execute a wide range of different operations. Moreover, the political setting in some conflicts may constrain U.S. forces from being able to operate to their full military advantage. In the Persian Gulf War, the political setting did not interfere with the U.S. commanders' ability to design a coherent military strategy and effectively employ their forces. The opposite occurred in the Vietnam War, where political considerations placed major constraints on U.S. force operations. Kosovo is a classic case of political goals affecting force operations.

The United States thus will need to be successful not only at designing superior forces but also at employing them skillfully in ways that achieve both military *and* political objectives on the battlefield. Other countries face a similar challenge. Wars will occur in which U.S. forces do not participate. There, too, the outcome will

**Deaths in Key Conflicts**




Sources: *The Washington Post*, April 24, 1999; Associated Press.

Hughes Aircraft Company

**The advanced, high-speed computer system (with a common integrated processor) for the F–22 air superiority fighter**

hinge on how military force is employed for political purposes.

## Future Wars: A Wide Spectrum of Force Operations.

Future regional wars likely will be waged with modern, high-technology forces and operations. They will not be fought frequently, but they will remain a principal focus of U.S. defense planning, as well as that of other major powers. Their possible outcomes will have major implications. Such wars may be big, involving very large forces. But some may involve fewer forces, yet have widespread strategic consequences.

Smaller wars waged at the lower end of the spectrum are already important and likely will become more so. They are not only heavily political but also span a wide range of operations. These diverse operations include peacekeeping, peace-enforcement, crisis interventions, and limited combat operations. Bosnia, Somalia, and Kosovo are examples of such operations, as are the recent confrontations with Iraq over its compliance with UN nonproliferation efforts.

Such conflicts place unique demands on force operations. While high-technology will likely dominate major regional wars, it may be less decisive in conflicts at the lower end of the spectrum. Such conflicts may be marked by bad weather, inhospitable terrain, and many small engagements in towns and urban areas, where information warfare, sensors, and smart munitions cannot be employed to full advantage.

Bosnia is an example. Prior to NATO intervention, this was an ethnic conflict waged with light infantry that operated over wide areas on rugged terrain. Small engagements were fought over local control of towns, villages, and roads. They responded to the alternating cycles of politics and weather, and dragged on for months and years, rather than reaching a climax in days and weeks. Many future wars may resemble Bosnia rather than *Desert Storm.*

Many countries will not face the dilemma of having to prepare their forces for both high-technology wars and lesser conflicts at the low end of the spectrum. They must deal only with their local situations, requiring operations focused on a narrow aspect of the spectrum of conflict. However, for the United States, staying prepared for both high-technology wars and low-technology conflicts will be one of the principal challenges confronting defense planning in the future.

The United States will need an effective framework for planning force operations for the full spectrum of future contingencies. The current framework views force deployments as beginning with initial forces focused on immediate

goals, followed by swift deployment of large forces for decisive operations. Force operations are viewed as normally beginning with a halt phase, followed by a buildup phase accompanied by battlefield missions aimed at degrading enemy forces, culminating in a decisive counterattack. This framework may continue to suffice, but it is a guiding template rather than a blueprint for specific events. The key is that U.S. forces must have the flexibility to respond effectively to all situations and the unique requirements created by each of them.

## Quality Over Quantity

In past conflicts, military quality mattered a great deal, but in most conflicts quantity was the ultimate arbiter. Military and industrial trends in the 20th century placed an even greater emphasis on mass. The Franco-German war of 1870 was fought by 400,000 troops apiece. World Wars I and II were waged by millions of troops on each side. In World War II, Germany's superior military quality initially gained major victories but ultimately was overpowered by larger forces. Similarly, during the Cold War, NATO was credited with having better weapons and other qualitative advantages in Central Europe, but many argued this was not enough to offset the Warsaw Pact's 2:1 quantitative advantage. Even though NATO steadily improved the quality of its forces, most observers remained worried about its numerical disadvantages. This seems likely to change. Quality is gaining in significance. This trend was evidenced in the Persian Gulf War. A qualitatively superior coalition force overwhelmingly defeated an equally large, or larger, Iraqi force.

Why is this trend emerging? One reason is that superior readiness, training, and doctrine can make a military force effective beyond its numbers—especially if its opponent is lacking in these areas. Another reason is technology. Previously, a new generation of military technology resulted in a 10 to 20 percent improvement over the last generation. It had only a marginal affect on forces balances, and forces with older weapons but adequate numbers could still hope to prevail in conflict. New technologies are providing a greater effectiveness. A combination of new platforms, information systems, better sensors, and munitions is greatly enhancing the qualitative performance of a force, regardless of its size.

This trend in quality validates U.S. force development and increases the likelihood that U.S. forces will remain capable of highly effective operations, even if they are not overpowering in size in some situations. This will be the case if the United States not only equips its forces with sophisticated technology, but also (equally important) continues to recruit and train high-quality personnel. Quality is a relative thing, though. Much depends upon the quality of adversary forces. While the United States and its coalition partners enjoyed a major qualitative advantage in the Persian Gulf War, that may not always be the case in some future conflicts.

## Information Technologies Enhancing Combat Power

*Joint Vision 2010* reflects this trend toward quality. Information systems and sensors promise greatly to enhance U.S. force effectiveness. They will allow U.S. commanders to see the entire battlefield. This will better enable them to detect enemy forces. They will be able to maneuver and fire with greater effectiveness while using combat power and logistic support with greater efficiency. Precision munitions will significantly enhance accuracy and lethality; this also means fewer munitions and less logistics support to achieve objectives. Previously, U.S. forces needed a high volume of ammunition to support campaigns. For example, daily ammunition expenditure for a ground division in intense fighting was as much as 1,000 tons. In the future, this ammunition requirement will be reduced.

The benefits of these technologies, however, will not be confined to U.S. forces. In varying degrees, they will be available to other countries on the open market. They will be able to pursue qualitative improvements at a relatively modest cost. Wealthier countries will be able to acquire new platforms as well as these force-enhancing technologies. Many countries' military forces will enter the information age, perhaps not to the same degree as U.S. forces, but to significant degrees nonetheless. They will be able to operate more effectively on the modern battlefield.

The use of these technologies reflects military history. At Waterloo, both Wellington and Napoleon viewed virtually the entire conflict from their command posts. The same was true at Gettysburg. Both sides had high battlefield awareness, but superior tactics and favorable terrain decided the outcome. In the late 19th century, the situation changed. The battlefield was extended beyond eyesight. Modern information

systems are reviving situational awareness, not creating something new.

Lethal munitions are also indicative of history. At Waterloo and Gettysburg, artillery and infantry fire were so lethal against unprotected troops that they produced very high casualties in a short period. During this era, major battles and entire wars often were fought to completion in a few days, or even one day. This lethality declined with the dispersal of forces over greater distances and the introduction of armor. Today, the new systems are extending the range of fires and reducing the protective effects of armor. This will increase lethality, perhaps not to the degree witnessed in the 19th century, but higher than the recent past.

Situational awareness and lethal firepower will help, but will not automatically guarantee success on the modern battlefield. Napoleon at Waterloo and Lee at Gettysburg possessed these capabilities and still lost to adversaries that had the same. In future conflicts, the outcome will depend on whether one contestant has significant advantages in these areas. However, it will also depend on which side can employ its forces faster and more effectively than the other. The advantage will increase for those acting effectively at the onset; the margin for error will shrink. In these ways, modern technologies are reemphasizing old principles of war, not diminishing them. Future forces may have more in common with Napoleon and Wellington than they think.

Information warfare thus will enhance combat power, but effective strategy on the battlefield will continue to play a major role in determining outcomes. U.S. force operations will be driven by a modern doctrine that future adversaries will not be able to match. But adversaries may increasingly emphasize asymmetric strategies aimed at slipping the punch of U.S. forces and delivering strong blows of their own. The key feature of an asymmetric strategy is not only that it differs from U.S. strategy, but also that it has countermanding effects. Such a strategy can allow adversary forces to pursue their goals even in the face of devastating U.S. firepower. During the Vietnam War, for example, enemy forces succeeded in slipping the U.S. punch while remaining viable on the battlefield. They suffered great losses, but they endured in strategic terms and eventually prevailed when political considerations led to the withdrawal of U.S. forces. In future wars, wily adversaries doubtless will try to craft such strategies of their own—for example, by winning quickly before U.S. forces can converge on the scene, or by dispersing their forces in rugged terrain to reduce their vulnerability. To the extent they succeed, U.S. force operations will be rendered more difficult despite their information warfare assets.

## Increasing Airpower

In the minds of many observers, airpower came into its own in the Gulf War. For many years, military analysts had predicted this development. Modern aircraft have increasingly been able to deliver large amounts of ordnance over long distances. For example, two to three wings of fighter-bombers can deliver the same tonnage of firepower as an armored division, at a range of 300 miles and more. Yet, air power's potential faced major obstacles. Air forces lacked the intelligence systems, avionics, and precision munitions to strike many targets effectively, especially mobile targets. Moreover, air defenses made it hard for attack aircraft to operate safely and effectively over the enemy's rear areas. These constraints are now diminishing. Air forces are able to have a greater impact on all force operations than before.

More accurate deep fires are playing a growing role in modern warfare. This includes more than manned aircraft. Long-range cruise missiles can be launched by naval forces. Ground forces are acquiring deep-fire assets of their own, in the form of tactical missiles. As a result, modern military forces are increasingly able to project large volumes of accurate, lethal firepower over long distances. These fires can engage enemy reserves approaching the battlefield. Deep interdiction missions can be conducted against enemy supply lines and logistic support assets. Additionally, strategic bombardment can attack industrial targets and even military forces.

U.S. forces will be the primary beneficiaries. U.S. forces traditionally have emphasized air power and deep fires more than other military establishments. The United States is making rapid strides in fielding such critical systems as JSTARS, BAT and Skeet antiarmor munitions, cruise missiles, and stealth aircraft. Yet, these benefits will not be limited to U.S. forces alone. The growing capability of air forces will give many countries increasingly potent military assets. In the future, one to two wings of fighter-bombers, equipped with precision munitions and backed by cruise missiles, may provide foreign countries with a

**An A–10 Warthog pilot preparing to take off from Aviano Air Base, Italy, in support of *Joint Forge***

growing capability to deliver devastating firepower. This capability can be used for deterrence and defense, but also for offensive purposes.

The principal effects of improved airpower and deep fires will likely be twofold. They will enable forces to engage at greater distances. They will also provide them greater combat power. Some previously vulnerable countries will be able to better defend themselves and inflict serious losses on aggressors. These capabilities also may permit some rogues to intimidate, coerce, and defeat their neighbors. More so than before, rogues may be able to attack at longer distances and engage arriving U.S. forces in a crisis region.

The effectiveness of U.S. air operations will continue to increase not only through new aircraft and munitions, but also through such new concepts as nodal analysis, effects-based warfare, rapid halt, and strategic control in support of joint operations. But, as Kosovo appears to indicate, air forces are unlikely to replace the need for ground and naval forces. Air forces often can deploy to a crisis zone faster than other forces, but their effectiveness can be degraded by rough terrain and bad weather. Even smart munitions are not perfectly lethal: their impact hinges on the number employed and their kill probabilities. Another factor is that airpower's effects are not manifested at once, but instead build in cumulative ways as a function of sorties flown over a period of days and weeks. Most important, airpower cannot perform several key missions in war. Only ground forces can protect borders, block invasion corridors, defend cities, generate enormous short-range firepower in a brief time, carry out close battles, protect endangered populations, and conquer large areas of land. Only naval forces can directly protect sea lanes and convoys. Only marine forces can conduct amphibious operations.

In some crises, air forces may be the first to arrive and will be the principal means for halting enemy aggression before ground and naval forces arrive on the scene. Even when buildups are fully completed, the effective use of air power can make it easier for ground and naval forces to perform their missions. This especially is the case when air forces are given an extended period to degrade the enemy before ground operations begin. Afterward, ground forces often will deliver the bulk of firepower for short, violent armored battles. But air forces will be quite important in helping break up enemy formations and disrupt their movements.

Ground operations are not going to disappear anytime soon. If anything, *Desert Storm* shows how U.S. ground forces can conduct swift, highly effective campaigns with low casualties when combined arms tactics are employed. In the future, U.S. ground forces will become stronger as they acquire better information systems, new deep-fire assets of their own, and improved doctrine. The same applies to naval and marine forces, which also are benefiting from smart munitions and the information revolution. As air forces also improve, the result will be an increase in the joint capacity to project power swiftly and to employ force decisively for a wide variety of situations.

Military effectiveness will be the result of all combat arms working jointly, rather than the ascendancy of any single component. Joint operations are critical because they create a synergistic combat power that is far greater than the sum of ground, air, and naval components operating separately. Their flexibility allows a force to conduct a variety of operations, in which the emphasis can shift from one component to another. Additionally, joint operations enable components to be mutually supporting.

U.S. forces are preeminent in joint operations. *Joint Vision 2010* seeks to further increase this preeminence. Few countries are likely to approach U.S. capabilities, but a large number may become skilled in an area of advanced warfare that has

been an exclusive province of U.S. forces and a small core of allies. Better skill at joint operations will broaden their military capabilities.

## Fast-Paced, Nonlinear, Maneuver Operations

Technology and joint doctrine seem likely to change the time-space dimension in warfare. Combat will occur at a faster tempo than previously. For example, U.S. ground forces in *Desert Storm* advanced more rapidly than was previously deemed possible. By 2010, rates of advance are expected to increase further. Air, naval, and ground operations will unfold at lightning speed. Future high-technology wars likely will be short, violent affairs, rather than prolonged conflicts. Likewise, conflict will occur over greater distances than now, largely because of the growing importance of airpower and deep strikes. Ground operations also will be more dispersed.

Fast-paced, high-technology warfare requires a new mentality. The combination of faster speed over a larger space sets the stage for equivalent changes in how high-technology military operations will be performed on the battlefield and in the mentality needed to carry them out. In earlier eras, warfare was often a sequence of unfolding events that could be carefully planned and choreographed. Also, operations could be conducted independently of each other. The moderate pace of combat permitted these operations to be adjusted in relation to each other. However, such operations are history. In the future, ground and air campaigns likely will be conducted with blistering intensity and great fluidity. They will involve real-time targeting, rapidly changing maneuver, and improvised operations. An overall information architecture will network all forces. A battlefield campaign will come to represent a seamless web of interlocking actions rather than a sequence of separate ones. Combat will resemble a fast-break in basketball more than a running game in football.

The future likely will witness the transition from linear operations based on firepower attrition to nonlinear operations based on maneuver and fracturing an enemy's cohesion. Ground offensive campaigns increasingly will be fast-moving attacks on enemy centers of gravity. Defensive campaigns will focus on counterthrusts against the attacker's flanks. Air operations will support ground campaigns through a combination of close support, battlefield interdiction, deep interdiction, and strategic bombardment. Together, air and ground operations will aspire to unravel the enemy's campaign, separate its force components from each other, paralyze the enemy's ability to respond, and destroy the enemy's will to fight. Surprise, shock, and tempo will also help shatter the cohesion of enemy forces and leave them vulnerable to subsequent defeat-in-detail. This new approach to war will require not only a different mentality but also new force structures and doctrines.

U.S. forces seem poised to adopt this new way of operating. But they likely will not be the only forces to make this transition. To one degree or another, other forces will make the transition as well. To the extent that this is the case, modern warfare will be shaped and conducted by more than one country.

## The Blurring Between Offense and Defense

In most wars in the 20th century, the distinction between offensive and defensive operations was clear. The offense was focused on advancing, while the defense was focused on remaining stationary and repulsing the attack. Forces also were organized differently. During the Cold War, for example, the Warsaw Pact had an offensive strategy and therefore structured its forces quite differently from NATO forces, which were designed for a defensive strategy.

In the coming era, the distinction between offense and defense may increasingly blur, largely because of technologies and doctrines that will make warfare more fast paced. In future wars, the strategic intentions of the contestants may differ greatly, but their force operations on the battlefield may resemble each other closely, because both will rely upon information warfare, operational mobility, deep strikes, and fast maneuvers.

Understanding the emerging interaction between offense and defense will be key to future military planning. The struggle for supremacy between the offense and defense is one of the richest dramas in military history. A great deal of theorizing has accompanied new technologies and doctrines. Yet, when wars broke out, contemporary opinion often proved wrong. For example, the machine gun was initially viewed as aiding the offense. However, in World War I, it was so decisive for the defense that trench warfare resulted. In the 1920s and 1930s, the defense was viewed as superior, but during World War II the offense predominated. The debate waged

back and forth during the Cold War, but no modern wars were fought to test prevailing theories.

Some argue that new technologies and doctrines will strengthen the defense at the expense of the offense. The idea that the defense will predominate is partly based on the ascendancy of U.S. forces over likely opponents. But the likelihood that U.S. forces will be operating on behalf of defensive strategic goals does not mean that their superior quality stems from defensive battlefield operations. When U.S. forces gained their shattering victory in *Desert Storm*, they were waging an offensive campaign. Doing so allowed them to seize the initiative and dictate the tempo, while compelling the Iraqis to react weakly to events. Although armored forces on the attack supposedly are vulnerable to defensive fires, few U.S. tanks and infantry fighting vehicles were destroyed. Reacting to this successful experience, *JV 2010* views defensive operations as necessary in the initial stages, but calls for U.S. forces eventually to launch counteroffensives that are viewed as the decisive, victory-producing stage of combat.

Clearly some new technologies will aid the defense, such as systems that enhance the ability to wage anti-armor warfare without large numbers of tanks. At issue, however, is the overall effect of many new systems and technologies.

The idea that the offense may be gaining ascendancy stems from three considerations. First, modern information warfare systems may give the offense an advantage in dominating the critical dynamics of force concentration and counterconcentration. This will be the case if the attackers can exploit gaps in the defense faster than the defender can perceive the attack unfolding. Second, precision weapons may negate the defender's advantage of prepared positions. Third, the defender may have less time to absorb the attack and recover. If these propositions hold true, the attacker may be able to advance and inflict losses faster than the defender can regain balance, countermaneuver, and degrade the attacker's strength.

Much will depend upon the specific capabilities of the contestants in each case. Better-prepared forces will always stand a good chance of winning regardless of whether they are on the offense or defense. Moreover, technology may alternate in conferring advantages on the offense and defense. However, the old adage that the offense must have a large numerical advantage to win may be no longer valid. In tomorrow's world, an attacker may use the offense to defeat opponents equal in size or larger.

Perhaps the proper conclusion is that defenders can still hope to defend if they have the proper operational concepts and forces. But the act of defending on the modern battlefield may require doctrines and forces that, in many ways, closely resemble what the attacker fields and how he operates. If so, the traditional distinction between offense and defense may do more than blur; it may largely disappear. This, too, will change how wars erupt and how they are carried out. The prospect of two contestants, each primed to deliver a quick knockout punch, may have a deterrent quality of its own. But when political crises occur in situations where the military advantage goes to the side that swings first, swift escalation may be difficult to prevent. In this way and others, the coming interaction between offense and defense promises to be one that merits close study because it will have not only military implications, but larger strategic implications as well.

## The Emphasis on Weapons of Mass Destruction

In the Cold War's aftermath, nuclear weapons are viewed as less important in military doctrine and warfare. For U.S. forces, this conclusion is clearly valid. U.S. and NATO forces relied heavily on tactical nuclear weapons during the Cold War because of numerical disadvantage. The Warsaw Pact's collapse greatly reduced this dependence on nuclear weapons. After *Desert Storm*, many concluded that the United States could defeat opponents without resorting to nuclear weapons. This belief was further reinforced by the revolution in military affairs, especially its information warfare systems and deep strike assets.

However, nuclear weapons and other weapons of mass destruction, like chemical and biological weapons, may have growing appeal for some countries lacking conventional capabilities. This became apparent when Russia unveiled a new military doctrine that declared its willingness to use tactical nuclear weapons first, even against opponents not possessing them. Russia's downsized conventional forces created uncertainty about whether they could conduct combat missions in stressful situations. Since then, India and Pakistan have crossed the nuclear threshold. Additionally, such rogues as Iraq, Iran, and North Korea are pursuing programs that conceivably


**Armored vehicles moving out in Exercise *Iron Spear* in Bosnia. The United States, United Kingdom, the Netherlands, Canada, the Czech Republic, New Zealand, and South Africa participated in the exercise.**

could produce weapons of mass destruction, missiles and other delivery vehicles by 2010 or earlier.

The proliferation of weapons of mass destruction could change how some conventional wars will be fought. During the Cold War, the United States and the Soviet Union understood mutual deterrence and took steps to configure their forces in ways that encouraged restraint. Whether future proliferators will be guided by similar beliefs and practices is uncertain. Some countries may not feel constrained in using them. Some may see them as offering tactical advantages against an enemy that otherwise could not be defeated. Other countries might integrate weapons of mass destruction into their conventional forces in ways that facilitate warfighting regardless of the situation.

A key concern is whether, and under what conditions, weapons of mass destruction might be employed in conflicts not involving U.S. forces. The potential for escalation could be high in situations where only one side possesses such systems but has insufficient conventional strength to accomplish its goals. Similarly, the incentives for escalation could be high in situations where both contestants possess weapons of mass destruction, and the side that uses them first gains the advantage. In these settings, use of weapons of mass destruction might be confined to the battlefield, but no guarantees exist that urban areas would not be hit intentionally or unintentionally.

An equal concern is whether future opponents might use weapons of mass destruction against U.S. and coalition forces in regional conflicts. During the Cold War, U.S. strategy called for a strong nuclear retaliatory response in situations of nuclear use against U.S. and allied forces. Although this option remains available, the emerging situation creates reasons for developing adequate defense systems and strike assets that will provide a broad spectrum of conventional options. Exactly how U.S. forces would be used in a particular situation is a hypothetical. However, a conventional conflict fought under a shadow of weapons of mass destruction likely would be quite different from one without. *Desert Storm* was waged with weapons of mass destruction in mind, but not to the point of greatly altering the U.S.-led coalition's conventional campaign plan. Future conflicts might not be so accommodating.

# Effect on U.S. Interests

These trends have important implications for U.S. interests. They suggest that ongoing U.S. force improvement efforts are seemingly responding to broader currents sweeping over global military affairs. The United States can be reasonably confident that it is adapting to change. However, this does not mean the future of warfare can be ignored. The United States also cannot take for granted its military power or that key national goals will always be achieved.

## Future Constraints on U.S. Forces

Improvements in doctrine and technology will enable U.S. forces to remain the world's preeminent military power. This superiority will give them high confidence in their ability to defeat opponents. Yet, the coming era may create political conditions that constrain the full potential of U.S. forces. Where crises occur will be one consideration. U.S. forces are best able to operate in regions with an overseas military presence, prepared military infrastructure, and good reception facilities; these exist in Western Europe, Northeast Asia, and Saudi Arabia, but not elsewhere. If crises occur beyond these areas, U.S. forces may be slow to deploy and employ. This could increase the difficulty of rebuffing aggressive enemy attacks in the early stages.

Especially in unfamiliar geographic areas, political considerations could pose further constraints. Politics is not a constraint when the conflict's causes and stakes are clear, U.S. goals are well established, and a clear war-winning strategy exists. When this is not case, and the

**Two aircraft carriers, a fast attack submarine, and two surface combatants participating in Operation *Southern Watch***

adversary is adept, U.S. forces may not be able to operate to their full advantage. Ideally, such conflicts should be avoided, but global affairs may not always allow the United States to fight wars of its own choosing.

## A Challenge to U.S. Force Superiority

Changes in warfare will affect foreign military forces as well. These trends could have both stabilizing and destabilizing effects. The coming technologies and doctrines promise to place advanced military capabilities in the hands of many countries. Many of the new technologies—especially information systems, sensors, and precision munitions—are not prohibitively expensive. They can be incorporated into existing force structures and platforms. They will significantly enhance the strength of small forces and improve offensive capabilities.

In the hands of responsible countries, these capabilities pose no threat to global order. However, in the hands of rogues or those seeking to change the status quo, these capabilities easily could intensify threats that already exist. They could weaken regional deterrence and increase the frequency of war. Moreover, they promise to make wars more violent and costly.

## More and Stronger Rogues

Better armed rogues mean a growing risk of war. Moreover, the number of rogues may increase, thus further increasing the occurrence of wars. This trend can be counteracted through deterrent strategies and better armed allies and partners. But the trend itself is inimical to U.S. interests.

If the increasing frequency of war threatens Western interests, the United States may be required to commit forces more often than is now realized. In the future, the United States will continue to face the threat of major theater wars in the Persian Gulf and Korea. However, as Kosovo shows, it may face more conflicts than these. Wars may break out in different geographic settings and cover a wide spectrum of contingencies.

## Challenges of Enemy Strategies

A key issue will be whether adversary forces acquire the capabilities needed to contest U.S. forces. This seems unlikely. After all, U.S. forces decisively won the Persian Gulf War, and the RMA is expected to transform and enhance their current combat power. Closer inspection, however, suggests a more troubled conclusion. The one-sided conditions of the Persian Gulf War are unlikely to be encountered again. Future enemies may be better prepared to fight than were Iraq's forces. They also may possess some of the same technological innovations that U.S. forces are adopting.

Enemies may employ asymmetric strategies that severely impede U.S. force deployments and employments. In the Persian Gulf War, the United States was allowed 6 months to carry out an uncontested buildup of huge ground, air, and naval forces. It enjoyed widespread international and local political conditions in ways allowing it to shape an employment strategy that played to its military strengths. At no time did the enemy take actions to interfere with this strategy and its force operations. When the fighting began, the United States was able to conduct an air bombardment of 6 weeks before launching a sweeping ground offensive that never was menaced by enemy counterthrusts. Future conflicts may see the opposite of these conditions in some respects. U.S. forces might have to achieve forced entry against stiff opposition. They may not be able to choose an optimal employment strategy. They might encounter enemies that are capable of defending themselves on the ground and even in the air. If so, these conditions could mean difficult fighting for U.S. forces, even with the newest technologies and doctrines.

Ever-changing military technology could affect the degree of U.S. superiority over adversaries. During the Persian Gulf War, two often

unnoticed technological advantages worked to the decisive advantage of U.S. forces. The suppression of Iraq's air defenses enabled coalition aircraft to operate with relative freedom over enemy territory. Iraq's anti-armor weapons were ineffective against U.S. armor, but U.S. anti-armor munitions were devastating against Iraq's armor. Both advantages were a product of recent history. A decade earlier, doubts existed about the effectiveness of U.S. air defense suppression technologies and the ability of U.S. armor to withstand enemy kinetic energy and high explosive anti-tank (HEAT) munitions. By the Gulf War, United States technologies in both areas had pulled ahead in the competitive dynamic. Whether the United States will maintain its advantages in these and other key areas remains to be seen. If it is diminished or lost, future conflicts could be harder to win for U.S. forces with minimum losses.

Forces and operating conditions in conflicts at the other end of the spectrum must be considered. In local conflicts such as ethnic clashes, U.S. forces may conduct peace-enforcement and limited crisis interventions. These operations may be pursued in cities, rugged terrain, and bad weather. Enemy weapons systems may not be advanced, but they may be adequate for the specific tasks at hand. In these situations, the U.S. technological advantage may be diluted.

## Allied Improvements

Capabilities of U.S. allies and coalition partners could constrain U.S. forces and affect U.S. interests. In the Persian Gulf War, the United States contributed about 80 percent of the coalition forces and performed most of the critical missions. In conflicts demanding greater allied contributions, their capabilities could matter significantly. U.S. forces may be greatly superior to adversary forces, but if allied and partner forces have not undergone a revolution in military affairs and made improvements similar to those envisioned in *Joint Vision 2010*, the coalition may not enjoy superiority. Conflicts could be more closely contested than if U.S. forces did most of the fighting. Differences in capabilities could make U.S. and allied interoperability more difficult. U.S. forces might even be inhibited in their use of some advanced systems in order to facilitate combined operations with allies and partners.

The proper conclusion is that, even for the United States, war is likely to remain a difficult, uncertain, and often costly enterprise. If the United States could count on the sheer momentum of the RMA to preserve its decisive military superiority in all situations, it could afford to put its defense planning on autopilot. It also could afford to pay little attention to what is happening in military affairs abroad. But this seems unlikely to be the case. If the United States is to remain superior not only in the easy wars, but in the hard ones as well, it will need to conduct its defense planning in focused and aware ways. In the final analysis, this type of planning was vital to winning the Cold War and the Persian Gulf War, and it will remain key to dealing successfully with the new types of warfare ahead.

# Consequences for U.S. Policy

The United States will continue to require strong forces for deterring and winning high-technology regional wars, large and small. It will also need forces for lesser operations, including peacekeeping and crisis interventions. Meeting this wide spectrum of operations will require a broad range of U.S. military capabilities. Additionally, these contingencies will demand U.S.

### U.S. Defense Budget: More Money for Better Forces

In February 1999, Secretary of Defense Cohen called for increased U.S. defense spending in the coming years. The purpose is to strengthen U.S. defense preparedness for the coming period of new threats, requirements, doctrines, and capabilities. Cohen's plan for FY2000–05 envisions $112 billion of additional resources. DOD savings will provide $28 billion; the remaining $84 billion will come from increased topline. His plan elevates DOD spending to $267.2 billion in FY 2000, and to $318.9 billion by FY05.

The increases include $36.5 billion for military pay and $49 billion for operations and maintenance. Much of the additional operations and maintenance money will be used to enhance the readiness of U.S. forces and to pay for rising optempo. For example, additional funds will be spent on such nuts-and-bolts measures as spares, stocks, depot maintenance, and base operations. Enhanced training will be another beneficiary. Steps also will be taken to enhance the preparedness of "low-density/high demand (LDHD)" forces that are especially important to carrying out the mounting number of peacekeeping operations and small-scale conflicts. Many of these forces are operated by the Special Operations Command.

DOD's procurement budget is slated to rise steadily from $53 billion in FY00 to $75.1 billion in FY05. This increase will enhance DOD's ability to pursue the sustained modernization called for by the Quadrennial Defense Review. Total funding for National Missile Defense (NMD) is $10.3 billion during FY00–05, an increase of $6.6 billion. A decision about NMD deployment is expected in June 2000, and will be influenced by the maturity of NMD technology as demonstrated in development and testing.

### The Three-Block War Concept

Experiences in Somalia and Bangladesh have resulted in the U.S. Marines adapting their training and operations to prepare for the application of tailored force across the full spectrum of military activity. For example, in block one, they will be involved in humanitarian operations, providing food and medical assistance for civilians. In block two, they will be the peacekeepers in a civil war situation, negotiating among the sides, providing some security, being an honest broker. In block three, they will be combatants in conflict, choosing sides and taking casualties. The skills needed for each block are different, as are the rules of engagement.

The key is that until they get there, they may not know which block they are in. Therefore, each individual combat unit must be able to size up the situation quickly, fall back on the set of skills needed for that "block," determine what the rules of engagement should be, and take the proper action. This requires a high degree of agility on the part of fairly junior officers and NCOs. That, in turn, has significant implications for organization and training.

This concept is different, however, from *JV 2010,* which focuses primarily on high-intensity conflict in a 200 x 200–mile grid. The model for *JV 2010* is *Desert Storm* or conflict with North Korea. Both *JV 2010* and the "the three block war" would rely increasingly on an information grid, but the two concepts, the associated doctrine, and the information technologies involved have not been fully harmonized. Marines believe each combat unit needs all the skills to fight a full-spectrum war, while the other services tend to rely more on specialization to achieve a full-spectrum capability.

The two concepts also make different assumptions about the kind of threats we will face in the future. The Marines see situations that are politically and militarily "messy," dealing primarily with failed states. *JV 2010* focuses more on rogue states and the emergence of a possible "near peer competitor."

forces that are flexible and maintained at high level of readiness. The key issue is determining how such forces will be built and maintained. This issue, as well as these trends, suggest that the U.S. defense agenda will remain both complex and demanding.

## Modernization—More Than Just Technology

Whether the RMA and procurement are being pursued fast enough will continue to be debated. Consideration must be given to the full range of factors that will also contribute to U.S. military effectiveness in the coming years. More will be required than sophisticated technology. Forces that are well trained, well motivated, and well led will be needed. Their operations will greatly depend on effective doctrine. Above all, they must have the will and determination to win. These human factors, rather than technology, were primarily responsible for the *Desert Storm* victory. These factors should not be sacrificed for the sake of new technology. History suggests that if U.S. forces are to win future wars, they will do so because they can fight better than their opponents, not solely because their hardware is better.

## A Flexible and Adaptive Force

In order to remain prepared, the United States will need forces adequate in quantity and quality. The coming years likely will witness a debate over whether the current U.S. posture of 13 active Army and Marine divisions, 20 USAF fighter wings, and 11–12 Navy carriers will meet future strategic demands. The prospect of continuously conducting global environment-shaping, peacekeeping, crisis interventions, and remaining prepared for major theater wars seems likely to stretch this posture thin in the coming years. Pressures may also arise to reduce this posture in order to fund readiness and procurement. Countervailing strategic pressures, however, may arise to retain this posture or even to enlarge it in order to engage globally. The United States will face a difficult task in balancing its defense priorities.

The current posture often is justified in terms of its ability to fight and win two major theater wars in the Persian Gulf and Korea. It also provides forces for combatant commanders to engage in peacetime environment shaping; this includes alliance participation, partnership-building, peacekeeping, and crisis response. In the event of a single, major, theater war, it provides forces not only for that contingency but also for reinforcing other regions and ensuring their stability. If a bigger war occurs, it allows for a stronger response while maintaining a strategic reserve. In these diverse ways, it provides insurance against an uncertain future, rather than just a script for a single event.

The current U.S. force posture provides a great deal of flexibility and adaptability. Unlike other countries, the United States has excellent mobility, ground forces, air forces, and naval assets. Its ground forces have sufficient armored/mechanized, infantry, air assault, and amphibious units. Its air forces can robustly perform a full spectrum of operations, including air defense, strategic bombing, and battlefield support. Its naval forces can defend sea lines of communication, project power in areas lacking bases, and support continental operations with long-range air and missiles. As a result, this posture's principal strength is that it has the inherent, modular capacity to support many different

strategies and operations. In essence, it can respond effectively on short notice when new strategies are adopted or new conditions suddenly emerge. Regardless of how future force-sizing decisions are made, this valuable characteristic should not be lost.

Marginal reductions may not cripple U.S. defense strategy. Such cutbacks could be offset by higher quality U.S. forces and stronger allied contributions. However, significant reductions could erode confidence and increase risks, in more contingencies than the two concurrent major theater wars (2–MTW). In the years ahead, the United States will need not only a flexible and adaptive force posture with sufficiently large and diverse assets but also an effective planning framework for guiding force preparation. In recent years, the 2–MTW framework has sufficed, but something broader and more responsive may be needed in the future.

## Testing for the Most Demanding Contingencies

Emerging military trends suggest that even though the revolution in military affairs may succeed, the quality of U.S. forces should not be taken for granted. How can the United States gauge whether its forces will possess the quality to prevail in future conflicts? What criteria should be used to gauge qualitative adequacy and determine program priorities? Answering these questions goes to the heart of determining how to prepare for the future.

A useful analytical test of U.S. military effectiveness will be contingency analysis: forecasting how future wars might unfold and then examining the likely performance of U.S. forces. This practice might focus on contingencies ranging from the least to the most demanding. Emerging trends suggest that analysis should examine cases in which well-prepared enemy forces do everything possible to complicate operations for U.S. forces. Such situations may arise with growing frequency in the future. These situations include enemy efforts to deny U.S. deployments to a crisis region, manipulating the political climate, making use of difficult terrain and weather, and aggressively employing conventional forces and weapons of mass destruction. Essentially, such efforts constitute a "countermanding" strategy aimed at negating U.S. operations. Such demanding tests measure the capacity to handle the difficult contingencies, not just the easy ones.

Analysis might examine the capacity of U.S. forces to handle a broader range of deployment and employment requirements than those currently postulated. For example, the "regional building block" of 5 to 6 divisions, 10 fighter wings, and 4 to 5 carrier battle groups can handle one type of regional war. Entirely different contingencies might arise, however, that mandate different force mixes. Some contingencies may call for a larger mix of air forces, others may call for more ground forces, and others may call for more naval and amphibious forces. U.S. forces must be adaptive and flexible. They must preserve the broad portfolio of assets and modular characteristics that allow them to handle a wide range of different contingencies and a broad spectrum of national military strategies

## U.S. Military Modernization: Accelerating Tempo

DOD's planned increase of procurement funds, from $49 billion in FY 99 to $75 billion by FY 05, owes heavily to the mounting requirement for modernization. This increase is being driven by a combination of normal obsolescence, new threats, new technologies from the research and development pipeline, and opportunities created by the information age.

U.S. air forces will especially benefit. Over the coming decade and beyond, acquisition of the F–22, the JSF, and the F/A–18E/F, JSTARS, and other models will equip the Air Force and Navy with a new generation of combat and support aircraft. In addition, U.S. air forces will be acquiring such new weapons as the AIM–9X, JASSM, JSOW, SFW, JDAM, and SLAM. The effect of these smart munitions will be to enhance the capacity of U.S. air forces for air-to-air and air-to-ground missions, including deep-strike operations.

Modernization of ground forces will feature upgrades of existing platforms, including the Army's Abrams tank, Bradley Fighting Vehicle, and Apache Longbow helicopter. The Army also will acquire the Comanche helicopter, the Crusader artillery system, and such missiles and munitions as ATACMs, BAT, SADARM, Javelin, and Predator. Marine Corps modernization includes the V–22 tilt-rotor aircraft, the Advanced Amphibious Assault Vehicle, and upgrades to utility and attack helicopters. Navy modernization includes the tenth Nimitz-class carrier, cruiser upgrades, and procurement of the DDG–51 destroyer, the LDP–17 amphibious transport dock ship, the T–ADC (X) logistics support ship, the New Attack Submarine, and improved cruise missiles. Airlift forces will be enhanced by procuring more C–17 aircraft and by upgrading the C–5 and KC–135 aircraft.

### NATO: Preparing for the New Era

The new era of warfare will affect not only American but NATO forces. One concern is that although current NATO forces can perform old missions, they are not equally prepared to perform new missions. Many missions will occur on Europe's periphery or even outside Europe. Also, European forces lack the capacity to perform swift power projection and decisive operations in ways that will be needed to stay abreast of U.S. forces.

To help solve these problems, NATO adopted a "Defense Capabilities Initiative" (DCI) at its April 1999 summit in Washington. The DCI aspires to create a "common operational vision" for NATO forces in ways that will preserve transatlantic interoperability. It calls for improvements in NATO C$^4$I systems, logistics support, mobility assets, engagement capabilities, survivability, and sustainment measures. It emphasizes affordable steps that can make effective use of existing resources. For example, it envisions greater use of multinational logistics and commercial sealift to enhance long-distance support and deployability. It is composed of both short-term steps and long-term plans that will take a decade to implement.

Comprehensive in scope, the DCI is similar to such earlier NATO 10-year plans as the LTDP of the 1970s and the CDI of the 1980s. Like all plans, it must be implemented. Provided this is the case, the DCI promises to help reconfigure NATO forces for the coming era of information warfare and new threats.

that may need to be altered as the international security system evolves.

Preparing for the future also mandates serious analysis of U.S. military interventions. Fighting regional wars may involve demanding combat, but execution will reflect clear-cut campaign plans. Recent experience, however, suggests that the future likely will produce many smaller interventions in murky situations where U.S. military operations directly support political goals. Learning how to employ U.S. forces in these conditions will be key to preparing for the future. The revolution in military affairs and *Joint Vision 2010* will not be fully effective unless military capabilities and mind-sets can deal with these situations. Likewise, they must produce forces that can effectively perform a wide range of peacekeeping missions. These missions may demand capabilities other than those used in high-technology combat operations.

## Ensuring Allied Compatibility with Future U.S. Forces

Finally, a strong U.S. effort must be focused on configuring the forces of allies and partners for future contingencies involving U.S. forces that have undergone a revolution in military affairs. Friendly forces in dangerous regions might be strengthened so that they can deter and initially defend prior to U.S. forces arriving in theater. Allied and partner forces might be configured for rapid deployment and employment alongside U.S. forces in a crisis region. Without this emphasis, U.S. forces will carry unfair and unmanageable burdens.

# Net Assessment

U.S. forces will remain the world's preeminent military power by a wide margin. However, their success in future military operations should not be taken for granted. Handling the wide spectrum of military operations ahead will be a daunting requirement. Moreover, warfare is changing, and adversary forces will benefit from modern doctrine and weapons in significant ways. In addition to pursuing the revolution in military affairs and *Joint Vision 2010*, continued broadening of U.S. defense strategy likely will be necessary.